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EXAMINER
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SALTARELLI, DOMINIC D

ART UNIT	PAPER NUMBER
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2611

15

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/489,373

**Applicant(s)**

KOPLAR ET AL.

**Examiner**

Dominic D Saltarelli

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 71-74, 76-100, 102-104, 106-120 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 71-74, 76-100, 102-104 and 106-120 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>14</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Drawings***

1. The drawings are objected to because the figures submitted past figure 15 are not enumerated with proper figure numbers. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 72 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 72 states the radio signal source receives promotional opportunities from "the source" (claim 72, line 2). It is unclear which source this is referring to. The display device is described as a source of promotional opportunities (claim 71, lines 1-2), the radio signal source is described as a source of promotional opportunities (claim 71, lines 1-2), or the source could be interpreted as a yet unclaimed third source of promotional opportunities.

***Claim Rejections - 35 USC § 102***

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 111, 112, and 120 are rejected under 35 U.S.C. 102(b) as being anticipated by Nemirofsky (5,594,493, of record).

Regarding claim 111, Nemirofsky discloses a method of providing a promotional opportunity from a sponsor to a user of a hand held device from the receipt of auxiliary data on the hand held device (col. 11, lines 30-42), the method comprising:

Supplying the user with the hand held device capable of capturing auxiliary data (an inherent feature, as the user of the card must acquire it before using it, col. 7, lines 30-33);

Broadcasting a video signal with auxiliary data on a display device viewed by the user (col. 14, lines 1-14);

Demodulating the video signal with auxiliary data on a decoder device (active relay station, col. 13, lines 48-58);

Transmitting by radio frequency the auxiliary data from the decoder device to the hand held device (active relay station, after decoding the auxiliary data, retransmits it using radio signals, col. 13, lines 48- 51);

Capturing the auxiliary data relating to the promotional opportunity on the hand held device (col. 13, lines 55-58); and

Providing the user with the promotional opportunity from the sponsor based on the receipt of the auxiliary data on the hand held device (wherein the data received by the hand held device is from the relay station, and not directly from the TV, col. 11, lines 30-42).

Regarding claims 112 and 120, Nemirofsky discloses the method of claim 111, and further discloses the auxiliary data is subliminally modulated within an active portion of the video signals in a substantially invisible way (col. 6, lines 46-51 and col. 7, lines 33-40 and col. 14, lines 1-13).

6. Claim 76 is rejected under 35 U.S.C. 102(b) as being anticipated by Von Kohorn (5,249,044, of record).

Regarding claim 76, Von Kohorn discloses a hand held device (fig. 1, unit 14) for a user to interact (users interact by specifying which promotional opportunities they wish to take advantage of, col. 9, lines 23-28 and col. 12, lines 12-16) with a source (fig. 1, central station 10, col. 9, lines 17-20 and col. 12, lines 17-22) of auxiliary data (machine readable code representing product identification information, col. 9, lines 20-28 and col. 12, lines 17-22) and providing one or more promotional opportunities pre-stored by a sponsor (the sponsor, or seller, provides the detailed information to the unit ahead of time, col. 9, lines 33-38 and col. 12, lines 17-18) on the device in conjunction with material presented by the source from the reception of auxiliary data from the source (product identification information is sent concurrently with the commercials

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which promote them, col. 9, lines 20-23 and col. 12, lines 17-22), the hand held device comprising:

A receiver (unit is provided with a means for receiving the auxiliary signals, col. 9, lines 17-20 and col. 12, lines 10-12) disposed on the hand held device for receiving auxiliary data from the source during presentation of the material; and

A central processing unit (an inherent feature of all electronic devices which process data) and other circuitry disposed on the hand held device and coupled to the receiver (sensors in unit 14, col. 12, lines 22-25) which compares the auxiliary data received against pre-stored data that triggers one or more pre-stored promotional opportunities for a user of the hand-held device (col. 12, lines 25-28).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 71-74, 103, and 113 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of Martin et al. (5,675,395) [Martin].

Regarding claim 71, Nemirofsky discloses a hand-held device (col. 9, lines 54-60) for receiving auxiliary data relating to promotional opportunities [benefits] (col. 7, lines 40-45) from a display device (fig. 1, TV 3) and a radio signal source (active relay station that transmits using RF, col. 13, lines 47-52) in response to video signals containing auxiliary data presented on the display device (relay station picks up light from TV and rebroadcasts it as RF, col. 13, lines 47-52), the hand held device comprising:

A photodetector (fig. 7, photo and data detector 70) disposed on the hand held device for receiving directly from the display device (col. 11, lines 30-43);

A CPU (fig. 5, microprocessor 20) and other circuitry coupled to a memory (fig. 5, RAM 30) (col. 10, lines 9-13) for processing and storing promotional opportunities received by the hand-held device (col. 9, lines 24-45 and col. 11, lines 30-42);

A decoding means (fig. 5, photo and data detector 70) on the hand held device for decoding the promotional opportunities resulting from the receipt and processing of auxiliary data (col. 11, lines 36-42) on the hand held device from the display device (fig. 1, TV 3).

Nemirofsky fails to disclose a radio frequency receiver disposed on the hand held device for receiving the promotional opportunities transmitted as auxiliary data from the radio signal source.

In an analogous art, Martin teaches a receiver (12) which includes a radio frequency receiver (RF antenna 20) in addition to possessing a photodetector (IR

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sensor 22) for receiving data (col. 3, lines 6-14), for the benefit of flexibly receiving data from a variant of differing sources (col. 3, lines 1-5).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Nemirofsky to include a radio frequency receiver, as taught by Martin. The reason for doing so is to improve the hand held device by enabling it to flexibly receive promotional opportunity data from a variety of different sources (i.e. directly from the TV screen or from the active relay device).

Regarding claim 72, Nemirofsky and Martin disclose the hand held device of claim 71, and further disclose the radio signal source is a decoder device for demodulating the promotional opportunities received from the source (active relay station must be a decoder device in order to extract [demodulate] the auxiliary information from the optical signal received from the TV in order to separately rebroadcast it as RF, Nemirofsky, col. 13, lines 47-58, wherein the function of the relay device is described in more detail in the incorporated reference to US Patent 4,807,031 to Broughton et al. [of record] in col. 7 line 58 – col. 8 line 53).

Regarding claim 73, Nemirofsky and Martin disclose the hand held device of claim 71, and further disclose a device display is disposed on the hand held



device (Nemirofsky, fig. 2, LCD 42) to present the promotional opportunities received (Nemirofsky, col. 11, lines 43-65).

Regarding claim 74, Nemirofsky and Martin disclose the hand held device of claim 73, and further discloses the device display is a liquid crystal display (Nemirofsky, fig. 2, LCD 42, col. 7, lines 53-56).

Regarding claims 103 and 113, Nemirofsky and Martin disclose the hand held device of claim 71, and further discloses the auxiliary data is subliminally modulated within an active portion of the video signals in a substantially invisible way (Nemirofsky, col. 6, lines 46-51 and col. 7, lines 33-40 and col. 14, lines 1-13).

9. Claims 77, 78, 79, 104, and 114 are rejected under 35 U.S.C. 103(a) as being unpatentable over Von Kohorn in view of Nemirofsky.

Regarding claims 77, 104, and 114, Von Kohorn discloses the hand-held device of claim 76, but fails to disclose the source is a display device and the receiver is a photodetector, wherein the auxiliary data is subliminally modulated within an active portion of the video signals.

In an analogous art, Nemirofsky teaches receiving auxiliary data (col. 7, lines 26-30) directly from a display device (fig. 1, TV 3) using a photodetector (fig. 2, PD 70) (col. 7, lines 26-49) wherein the auxiliary data is subliminally modulated within an active portion of the video signals in a substantially invisible way (col. 6,

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lines 46-51 and col. 7, lines 33-40), utilizing a robust, and therefore less prone to transmission error, form of data transmission that has been proven to function on cable television and broadcast stations using existing equipment (col. 5, lines 31-35).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Von Kohorn to include the source is a display device and the receiver is a photodetector wherein the auxiliary data is subliminally modulated within an active portion of the video signals, as taught by Nemirofsky. The reason for doing so is to utilize a robust, and therefore less prone to transmission error, form of data transmission for transmitting the auxiliary data, that has been proven to function on cable television and broadcast stations using existing equipment, alleviating the need for any major investment in new equipment or change in infrastructure.

Regarding claim 78, Von Kohorn discloses the hand-held device of claim 76, but fails to disclose the source is a radio signal source and the receiver is a radio frequency receiver.

In an analogous art, Nemirofsky teaches transmitting information to a hand held device using RF signals (col. 13, lines 48-58), improving reception by the hand held device increasing the reception range and negating optical interference (col. 13, lines 53-58).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Von Kohorn to include the source is a radio signal source and the receiver is a radio frequency receiver, as taught by Nemirofsky. The reason for doing so is to improve reception by the hand held device, increasing the reception range and negating optical interference.

Regarding claim 79, Von Kohorn discloses the hand held device of claim 76, but fail to disclose the source is a display device and a radio signal source.

In an analogous art, Nemirofsky discloses receiving auxiliary data from both a display device (Nemirofsky, fig. 1, TV 3, col. 7, lines 40-45) and a radio signal source (Nemirofsky, active relay station which increases the range at which the hand held device can receive auxiliary data by rebroadcasting the data as RF, col. 13, lines 48-58), utilizing a robust, and therefore less prone to transmission error, form of data transmission that has been proven to function on cable television and broadcast stations using existing equipment (col. 5, lines 31-35) and providing a back up or alternative form of signal transmission in the form of a radio signal source (col. 13, lines 55-58).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Von Kohorn to include the source is a display device and a radio signal source, as taught by Nemirofsky. The reason for doing so is to utilize a robust, and therefore less prone to transmission error, form of data transmission for transmitting the auxiliary data, that has been

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proven to function on cable television and broadcast stations using existing equipment, alleviating the need for any major investment in new equipment or change in infrastructure, and also provide a back up or alternative form of signal transmission, which would extend the range of the hand held device and alleviate problems with interference, in the form of a radio signal source.

10. Claim 80 is rejected under 35 U.S.C. 103(a) as being unpatentable over Von Kohorn and Nemirofsky as applied to claim 77 above, and further in view of Martin.

Regarding claim 80, Von Kohorn and Nemirofsky disclose the hand held device of claim 77, but fail to disclose the receiver comprises both a photodetector and a radio frequency receiver.

In an analogous art, Martin teaches a receiver (12) which includes a radio frequency receiver (RF antenna 20) in addition to possessing a photodetector (IR sensor 22) for receiving data (col. 3, lines 6-14), for the benefit of flexibly receiving data from a variant of differing sources (col. 3, lines 1-5).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Von Kohorn and Nemirofsky to also include a radio frequency receiver, as taught by Martin. The reason for doing so is to improve the hand held device by enabling it to flexibly receive promotional opportunity data from a variety of different sources (i.e. directly from the TV screen or from the active relay device).

11. Claim 110 is rejected under 35 U.S.C. 103(a) as being unpatentable over Von Kohorn and Nemirofsky as applied to claim 104 above, and further in view of Walker et al. (6,327,573) [Walker].

Regarding claim 110, Von Kohorn and Nemirofsky disclose the hand held device of claim 104, and further disclose a indication display (Von Kohorn, fig. 2, display 18) disposed on the hand held device for displaying promotional opportunities to the user of the hand held device based on the auxiliary data received by the hand held device (col. 9, lines 23-33).

Von Kohorn and Nemirofsky fail to disclose the indication display is nonalphanumeric and the promotional opportunities are relative.

Nemirofsky further teaches a nonalphanumeric display (col. 11, lines 6-9), which allows full flexibility in displaying both graphic and text information.

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Von Kohorn and Nemirofsky to include a nonalphanumeric display, as taught by Nemirofsky. The reason for doing so is to allow for full flexibility in displaying both graphic and text information relating to the received auxiliary information.

In an analogous art, Walker teaches a reward system wherein the rewards are assigned based on met threshold levels, or tiers (col. 9, lines 58-61), meaning that each successive reward level is relative to the previous reward level, with progressive benefits to the user as each reward tier is met in turn.

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Von Kohorn and Nemirofsky to include relative promotional opportunities, as taught by Walker. The reason for doing so is to provide more desirable promotional opportunities during the course of user interaction with the source of auxiliary data.

12. Claims 81-83 and 115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of Walker.

Regarding claim 81, Nemirofsky discloses a hand-held device (col. 9, lines 54-60) that receives promotional opportunities [benefits] (col. 7, lines 40-45) from a source (fig. 1, TV 3); the hand held device comprising:

A receiver (fig. 7, photo and data detector 70) disposed on the hand held device for receiving the promotional opportunities from the source (col. 11, lines 30-43);

A CPU (fig. 5, microprocessor 20) and other circuitry coupled to a memory (fig. 5, RAM 30) (col. 10, lines 9-13) for processing and storing promotional opportunities received by the hand-held device (col. 9, lines 24-45 and col. 11, lines 30-42); and

a nonalphanumeric display (fig. 5, LCD 42) disposed on the handheld device (col. 11, lines 3-9), for displaying the promotional opportunities to the user of the hand held device (col. 11, lines 43-65).

Nemirofsky fails to disclose the promotional opportunities are incremental and are provided to a user for progressive activity.

In an analogous art, Walker teaches a reward system wherein the rewards are assigned based on met threshold levels, or tiers (col. 9, lines 58-61), meaning that each successive reward level is relative to the previous reward level, with progressive benefits to the user as each reward tier is met in turn.

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Nemirofsky to include incremental promotional opportunities provided to a user for progressive activity, as taught by Walker. The reason for doing so is to provide more desirable promotional opportunities during the course of user interaction with the source of auxiliary data.

Regarding claim 82, Nemirofsky and Walker disclose the hand-held device of claim 81, and further disclose the source is a display device (Nemirofsky, fig. 1, TV 3) and the receiver is a photodetector (col. 9, lines 39-42).

Regarding claim 83, Nemirofsky and Walker disclose the hand-held device of claim 81, and further disclose the source is a radio signal source (Nemirofsky, active relay station transmits by radio wave, col. 13, lines 48-58) and the receiver is a radio frequency receiver (an inherent feature when the transmitter is an RF transmitter).

Regarding claim 115, Nemirofsky and Walker disclose the hand held device of claim 81, and further disclose the incremental opportunities are modulated within a video signal in a substantially invisible way (Nemirofsky, col. 6, lines 46-51 and col. 7, lines 33-40).

13. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky and Walker as applied to claim 81 above, and further in view of Martin.

Regarding claim 84, Nemirofsky and Walker disclose the hand held device of claim 81, and further disclose the source is either a display device (Nemirofsky, fig. 1, TV 3) or a radio signal source (Nemirofsky, active relay station which rebroadcasts using RF, col. 13, lines 48-52), and the receiver comprises both photodetector (fig. 7, photo and data detector 70, col. 11, lines 30-43), but fails to disclose the receiver also comprises a radio frequency receiver.

In an analogous art, Martin teaches a receiver (12) which includes a radio frequency receiver (RF antenna 20) in addition to possessing a photodetector (IR sensor 22) for receiving data (col. 3, lines 6-14), for the benefit of flexibly receiving data from a variant of differing sources (col. 3, lines 1-5).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Nemirofsky and Walker to also include a radio frequency receiver, as taught by Martin. The reason for doing so



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is to improve the hand held device by enabling it to flexibly receive promotional opportunity data from a variety of different sources (i.e. directly from the TV screen or from the active relay device).

14. Claims 85 and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky and Walker, as applied to claim 81 above, and further in view of Bullock et al. (5,070,404, of record) [Bullock].

Regarding claims 85 and 88, Nemirofsky and Walker disclose the hand-held device of claim 81, but fail to disclose the indication display is a plurality of LEDs and wherein the respective levels illuminate at least one LED corresponding to one or more promotional opportunities received by the hand-held device.

Bullock teaches a device with a display comprising separate indicator LEDs (col. 7, lines 25-34), one for each type or class of promotional opportunities or auxiliary data received by the device, indicating to the user which promotional opportunities are available.

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand-held device disclosed by Nemirofsky and Walker to make the indication display a plurality of LEDs and wherein the respective levels illuminate at least one LED corresponding to the one or more incremental promotional opportunities received by the hand-held device, as taught by Bullock,

for the benefit of indicating to the user which promotional opportunities are available.

15. Claims 86 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky, Walker, and Bullock as applied to claim 85 above, and further in view of Brooks et al. (5,483,276, of record) [Brooks].

Regarding claim 86, Nemirofsky, Walker, and Bullock describe the hand-held device of claim 85, but fail to disclose the LEDs are either the same color or different colors for providing an indication of the promotional opportunities or auxiliary data received by the hand-held device.

Brooks discloses using a plurality of LEDs of different colors, in order to provide color-coded messages as indicators (col. 8, lines 1-3).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand-held device of Nemirofsky, Walker, and Bullock to include LEDs of different colors for providing an indication, as taught by Brooks, for the benefit of providing color coded indications to distinguish information, (i.e. promotional opportunities).

Regarding claim 87, Nemirofsky, Walker, and Bullock, describe the hand-held device of claim 85, but fail to disclose the respective levels are progressively illuminated LEDs corresponding to the incremental promotional opportunities received by the hand-held device.

Brooks discloses the use of a plurality of LEDs to form a pattern indicative of received auxiliary data (col. 8, lines 1-3). Using successive LEDs to represent successive levels of received promotional opportunities is a very minor variation of the embodiment presented by Brooks.

It would have been obvious at the time to a person of ordinary skill in the art to alternatively modify the hand-held device disclosed by McMahon, Gottlich, Nemirofsky, and Bullock to represent the respective levels of relative promotional opportunities with successive illuminating LED's corresponding the relative promotional opportunities received by the hand-held device, for the advantage of providing a technique to distinguish promotional opportunities.

16. Claims 89-93, 95, 106, and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of Laor (6,076,069).

Regarding claim 89, Nemirofsky discloses a hand-held device (col. 9, lines 54-60) for receiving auxiliary data relating to promotional opportunities (col. 11, lines 30-43) from a source of auxiliary data (fig. 1, TV 3), the hand held device comprising:

A receiver (fig. 7, photo and data detector 70) disposed on said hand-held device for receiving a signal with auxiliary data from the source (col. 11, lines 30-43);

A central processing unit (fig. 5, microprocessor 20) and other circuitry disposed (col. 10, lines 1-19) on the hand-held device for processing the auxiliary data received by the hand-held device (col. 9, lines 38-45);

A memory (fig. 5, RAM 30) disposed on the hand-held device and coupled to the CPU for storing the auxiliary data; and

A computer interface means on the hand-held device for communicating (card can communicate its contents to external devices, col. 14, lines 18-26) with a computer (col. 14, lines 39-42)

Nemirofsky fails to disclose remote processing of the auxiliary data on the computer to provide the user with promotional opportunities from receiving and processing of the auxiliary data.

In an analogous art, Laor teaches a system for redeeming electronic coupons (col. 3, lines 12-30) wherein the coupons are received (col. 5, lines, 13-14), stored (col. 4, lines 55-56) and processed [redeemed] (col. 4 line 56 – col. 5 line 5) on a computer (col. 5, lines 15-18), allowing users to redeem electronic coupons over the internet from the convenience of their home, or any location with internet access (col. 5, lines 22-37).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Nemirofsky to include remote processing of the auxiliary data on a computer to provide the user with promotional opportunities from receiving and processing of the auxiliary data, as taught by Laor. The reason for doing so is to allow user to redeem the received

promotional opportunities from the convenience of their home, or any location with internet access.

Regarding claim 90, Nemirofsky and Laor disclose the hand held device of claim 89, and further disclose a decoder disposed on the hand-held device for decoding the promotional opportunities received from the source (Nemirofsky, photo and data detector 70, col. 11, lines 37-43).

Regarding claim 91, Nemirofsky and Laor disclose the hand held device of claim 89, and further disclose the source is a display device (Nemirofsky, fig. 1, TV 3, col. 11, lines 30-43) and the receiver is a photodetector (Nemirofsky, fig. 7, photo and data detector 70, col. 7, lines 56-58).

Regarding claim 92, Nemirofsky and Laor disclose the hand held device of claim 89, and further disclose the source is a radio signal source (Nemirofsky, active relay station transmits by radio wave, col. 13, lines 48-58) and the receiver is a radio frequency receiver (an inherent feature when the transmitter is an RF transmitter).

Regarding claim 95, Nemirofsky and Laor disclose the hand held device of claim 89, and further disclose the computer interface is a portable data storage for transferring the promotional opportunities to the computer (Nemirofsky, the

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hand held device is a portable data storage, containing RAM 30 for storing data before it is transferred to the computer, col. 9, lines 34-36 and col. 14, lines 40-43).

Regarding claims 106 and 116, Nemirofsky and Laor disclose the hand held device of claim 89, and further disclose the auxiliary data is subliminally modulated within an active portion of the video signals in a substantially invisible way (Nemirofsky, col. 6, lines 46-51 and col. 7, lines 33-40 and col. 14, lines 1-13).

17. Claim 94 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky and Laor as applied to claim 94 above, and further in view of Martin.

Regarding claim 94, Nemirofsky and Laor disclose the hand held device of claim 89, and further disclose the source is either a display device (Nemirofsky, fig. 1, TV 3) or a radio signal source (Nemirofsky, active relay station transmits by radio wave, col. 13, lines 48-58) and the receiver comprises a photodetector (fig. 7, photo and data detector 70, col. 11, lines 37-42), but fails to disclose the receiver also comprises a radio frequency receiver.

In an analogous art, Martin teaches a receiver (12) which includes a radio frequency receiver (RF antenna 20) in addition to possessing a photodetector (IR sensor 22) for receiving data (col. 3, lines 6-14), for the benefit of flexibly receiving data from a variant of differing sources (col. 3, lines 1-5).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Nemirofsky and Laor to also include a radio frequency receiver, as taught by Martin. The reason for doing so is to improve the hand held device by enabling it to flexibly receive promotional opportunity data from a variety of different sources (i.e. directly from the TV screen or from the active relay device).

18. Claim 96 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky and Laor as applied to claim 89 above, and further in view of Robb (6,177,950, of record).

Regarding claim 96, Nemirofsky and Laor disclose the hand-held device of claim 89, and additionally teach visual conformation of good data reception (Nemirofsky, col. 11, lines 36-37), but fail to disclose an aiming light which serves as an indication that the hand-held device is suitable oriented to receive promotional opportunities.

Robb teaches the use of indicator lights to advise a user on the correct usage of a hand held device (col. 6, lines 29-31)

It would have been obvious at the time to further modify the hand-held device of Nemirofsky and Laor to include an aiming light as an indication that the hand-held device is suitably oriented [the correct usage of the device] to receive promotional opportunities, as taught by Robb. The reason for doing so would be

to provide visual conformation of good data reception indicating proper usage of the device.

19. Claim 97, 107, and 117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of Dominguez (5,946,635, of record) and Martin.

Regarding claim 97, Nemirofsky discloses a method of interactive advertising and promotion in connection with a user's observance of events (col. 11, lines 30-42) comprising:

Transmitting auxiliary data related to such events (col. 3, lines 58-63, col. 7, lines 26-49, and col. 14, lines 1-14), wherein the auxiliary data is associated with sponsors and carries promotional opportunities of special significance relative to the event, the sponsor and the promotional opportunities are of special value to the user (col. 4, lines 3-6, col. 7, lines 45-49, and col. 11, lines 37-46);

Providing means (fig. 7, photo and data detector 70) for receiving the auxiliary data for the user of a hand-held device (col. 4, lines 36-41, col. 7, lines 30-45, and col. 11, lines 37-42) while it views the events on a display device (fig. 1, TV 3), the hand held device being capable of receiving the auxiliary data from a display device (using photo and data detector 70, col. 11, lines 37-42) or a radio signal source (the active relay station transmits using RF, col. 13, lines 49-58); and

providing benefit to the user of the hand-held device (col. 5, lines 45-50 and col. 11, lines 37-42) for selectively receiving (col. 11, lines 30-37) the



promotional opportunities (col. 11, lines 37-42), the hand-held device being capable of retaining indication of having received the promotional opportunities (col. 11, lines 46-55).

Nemirofsky fails to disclose the events observed are sporting, racing, or other special events and to provide a means on the hand-held device for receiving the auxiliary data for the user of the hand-held device while the user attends the events and that the hand held device can selectively receive the auxiliary data from the display device and the radio signal source.

Dominguez discloses a method utilizing a hand-held device (10) (col. 4, lines 6-7) for receiving auxiliary data from a radio signal source (col. 1, lines 15-20) which can be used while the user attends a special event, such as racing. This method allows user interactivity with said event while the user attends the event (col. 2, lines 43-50), enhancing the experience of attending the event.

It would have been obvious at the time to a person ordinary skill in the art to further modify the method of Nemirofsky to provide a means for receiving the auxiliary data for the user of the hand-held device while the user attends events, such as racing, as taught by Dominguez, allowing interactivity with said event while the user attends the event, enhancing the user's enjoyment.

In an analogous art, Martin teaches a receiver (12) which includes a radio frequency receiver (RF antenna 20) in addition to possessing a photodetector (IR sensor 22) for receiving data (col. 3, lines 6-14), for the benefit of flexibly receiving data from a variant of differing sources (col. 3, lines 1-5).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand held device disclosed by Nemirofsky and Dominguez to selectively receive the data through a photodetector and an RF receiver, as taught by Martin. The reason for doing so is to improve the hand held device by enabling it to flexibly receive the auxiliary data from a variety of different sources (i.e. directly from the TV screen or from the active relay device).

Regarding claims 107 and 117, Nemirofsky, Dominguez, and Martin disclose the hand held device of claim 97, and further disclose the auxiliary data is subliminally modulated within an active portion of the video signals in a substantially invisible way (Nemirofsky, col. 6, lines 46-51 and col. 7, lines 33-40 and col. 14, lines 1-13).

20. Claims 98, 99, 102, 108, and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of Boggs et al. (4,789,371, of record) [Boggs].

Regarding claims 98, 99, and 102, Nemirofsky discloses a method of interactive advertising and promotion relative to material presented by a display device (col. 3, lines 50-57 and col. 11, lines 30-42) comprising:

Transmitting auxiliary data during presentation of the material, where the auxiliary data is associated with a sponsor of the material and carries promotional opportunities (col. 3, lines 58-63, col. 11, lines 37-42, and col. 14, lines 1-14);

Providing means for receiving the auxiliary data for users of a hand-held device while they view the events on a display device (fig. 7, photo and data detector 70, col. 11, lines 37-42); and

Providing a benefit to the user of the hand-held device for selectively receiving the promotional opportunities (col. 11, lines 30-46), the hand-held device being capable of retaining indication of having received the promotional opportunities (LCD 42) (col. 11, lines 53-55), this indication comprises a means for presenting to the user the promotional opportunities received by means of the auxiliary data.

Nemirofsky fails to disclose making the hand-held device resemble a snap-shot camera with a simulated lens so as to suggest to the user a camera-like method of using the hand-held device to obtain the auxiliary data.

Boggs discloses a toy camera that resembles a snap-shot camera and a simulated lens (12) which simulates a real camera (col. 2, lines 41-47) for the advantage of providing a familiar mechanism to simulate an image pickup device (col. 2, lines 60-68 and col. 4, lines 5-11).

It would have been obvious at the time to a person of ordinary skill in the art to modify the hand-held device of Nemirofsky to make the hand-held device resemble a snap-shot camera with simulated lens, as taught by Boggs, for the advantage of providing a familiar camera-like structure for using the hand-held device to pick up data by pointing at the data.

Regarding claims 108 and 118, Nemirofsky and Boggs disclose the method of claim 98, and further disclose the auxiliary data is subliminally modulated within an active portion of the video signals in a substantially invisible way (Nemirofsky, col. 6, lines 46-51 and col. 7, lines 33-40 and col. 14, lines 1-13).

21. Claims 100, 109, and 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nemirofsky in view of Wagner (5,742,845, of record).

Regarding claim 100, Nemirofsky discloses a method of purchasing a desired product through interactive advertising from a source (col. 3, lines 42-56, col. 5, lines 45-50, and col. 11, lines 43-46), the method comprising:

Supplying a user with a hand-held device (an inherent feature, as the user of the hand held device must acquire the device before using it) capable of capturing a promotional opportunity relative to a desired product from the source (col. 3, lines 50-63 and col. 11, lines 30-42); and

Capturing the promotional opportunity relative to the desired product on the hand-held device by the user (col. 11, lines 30-42).

Nemirofsky fails to disclose utilizing a hand-held device with a computer interface capable of connection to a computer with Internet access to purchase the desired product for the user.

Wagner discloses a transaction and data system (col. 5, lines 35-43 and col. 9, lines 56-60) which would allow a hand-held device with a computer

interface capable of connection to a computer with Internet access (col. 6, lines 27-34 and col. 9, lines 56-66, wherein the hand held device is a smart card, read through smart card reader 32) to purchase desired products (col. 6, lines 35-42 and col. 10, lines 40-45). Such a system allows hand-held devices access to the Internet for purchasing desired products where such access was not previously possible (col. 6, lines 16-20).

It would have been obvious at the time to a person of ordinary skill in the art to modify the method disclosed by Nemirofsky to include a hand-held device with a computer interface capable of connection to a computer with Internet access to purchase the desired product for the user, as taught by Wagner, for the advantage of allowing the hand-held device access to the Internet for purchasing desired products where such access was not previously possible, increasing the usefulness of the hand held device.

Regarding claims 109 and 119, Nemirofsky and Wagner disclose the hand held device of claim 100, and further disclose the auxiliary data is subliminally modulated within an active portion of the video signals in a substantially invisible way (Nemirofsky, col. 6, lines 46-51 and col. 7, lines 33-40 and col. 14, lines 1-13).

### ***Response to Arguments***

22. Applicant's arguments with respect to claims 71-74, 76-84, and 89-97 have been considered but are moot in view of the new grounds of rejection.

23. In response to applicant's argument that the Bullock reference teaches away from the claimed invention (applicant's response, amendment B, page 26) because Bullock teaches LEDs are lit in response to the type of coupon downloaded, Bullock does not require user interaction, and Bullock also includes a printer, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the only modification being made in view of Bullock is the use of LED's to represent downloaded information.

24. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (regarding the inclusion of Bullock regarding claim 85, applicant's response, amendment B, page 27), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a

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reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

25. In response to applicant's argument that Brooks teaches away from the claimed invention regarding claims 86 and 87 (applicant's response, amendment B, page 28), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the only modifications made in view of Brooks is the use of varied LED configurations to convey information regarding downloaded information.

26. In response to applicant's argument that Dominguez teaches away from the claimed invention in that the radio frequencies received are listened to and do not include auxiliary data (applicant's response, amendment B, pages 30-31), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the only modification made in view of Dominguez is the reception of RF

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signals during the observance of a sporting event to enhance a viewer's enjoyment of the event.

27. In response to applicant's argument that there is no suggestion to combine Nemirofsky with Wagner regarding claim 100 (applicant's response, amendment B, page 31), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Wagner teaches using devices which are not ordinarily used in internet based transactions in internet based transactions, for the benefit of increasing the usefulness and flexibility of said devices. Nemirofsky teaches a device not ordinarily used in internet based transactions (smart card which receives signals from a display device and/or radio signal source). Therefore the Wagner reference provides motivation to combine the teachings found in the Wagner reference with the invention disclosed in the Nemirofsky reference.

28. In response to applicant's argument that Nemirofsky teaches away from Boggs (and vice versa) regarding claims 98 and 102 (applicant's response, amendment B, page 32), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the



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claimed invention must be expressly suggested in any one or all of the references.

Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, the only modification made in view of Boggs is shaping a device which is not a camera to look like a camera for user enjoyment.

### ***Conclusion***

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Freeman et al. (6,068,183), Wong et al. (6,592,044), Holman (5,285,278) and Holman (5,287,181).

27. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic D Saltarelli whose telephone number is (703) 305-8660. The examiner can normally be reached on M-F 10-7.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (703) 305-4038. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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DS



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